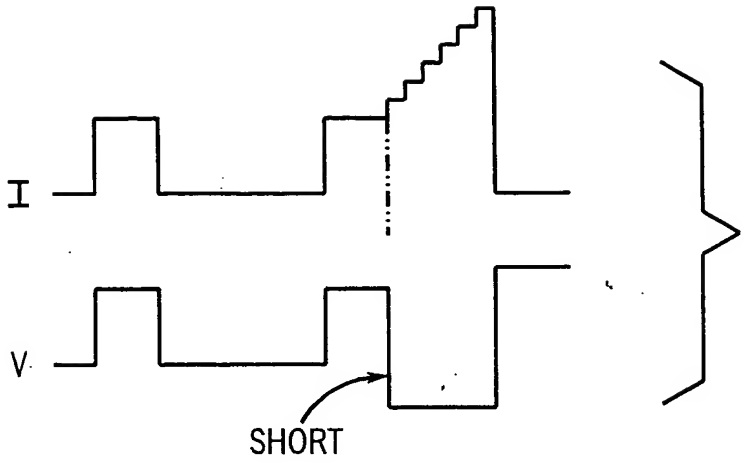

FIG. 1
(PRIOR ART)

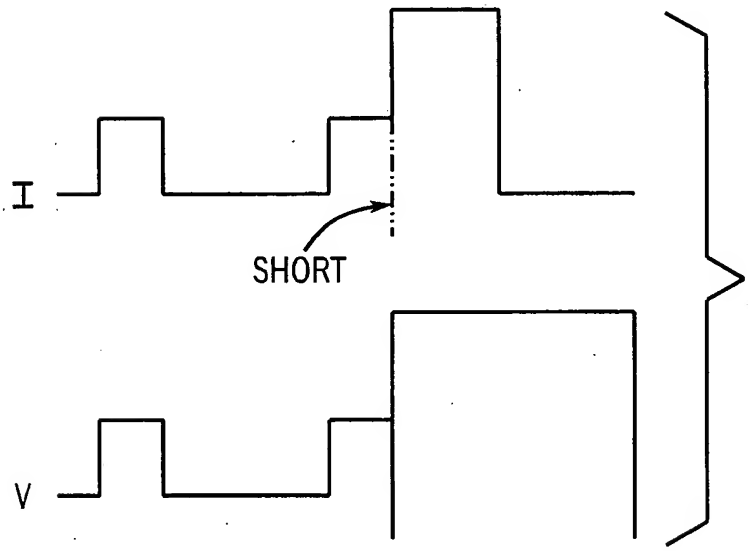

FIG. 2
(PRIOR ART)

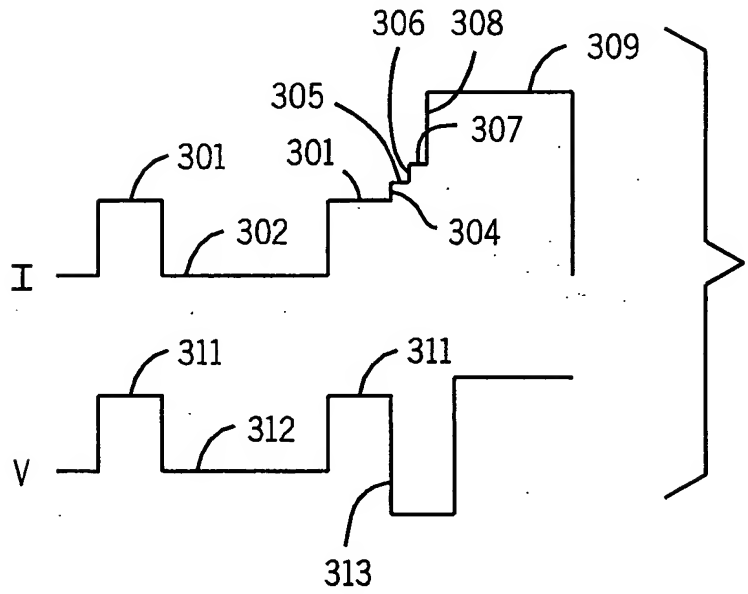

FIG. 3

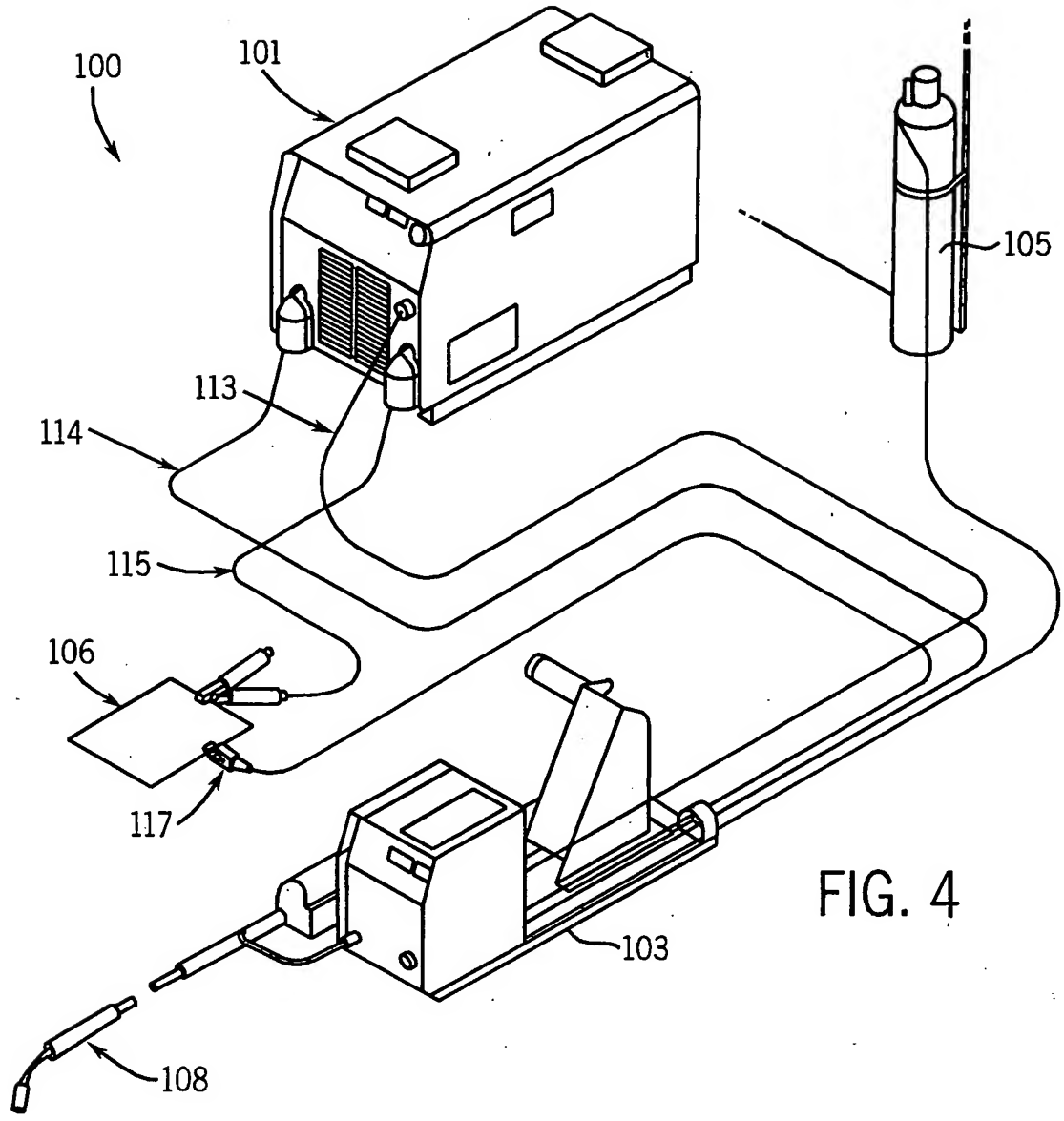

FIG. 4

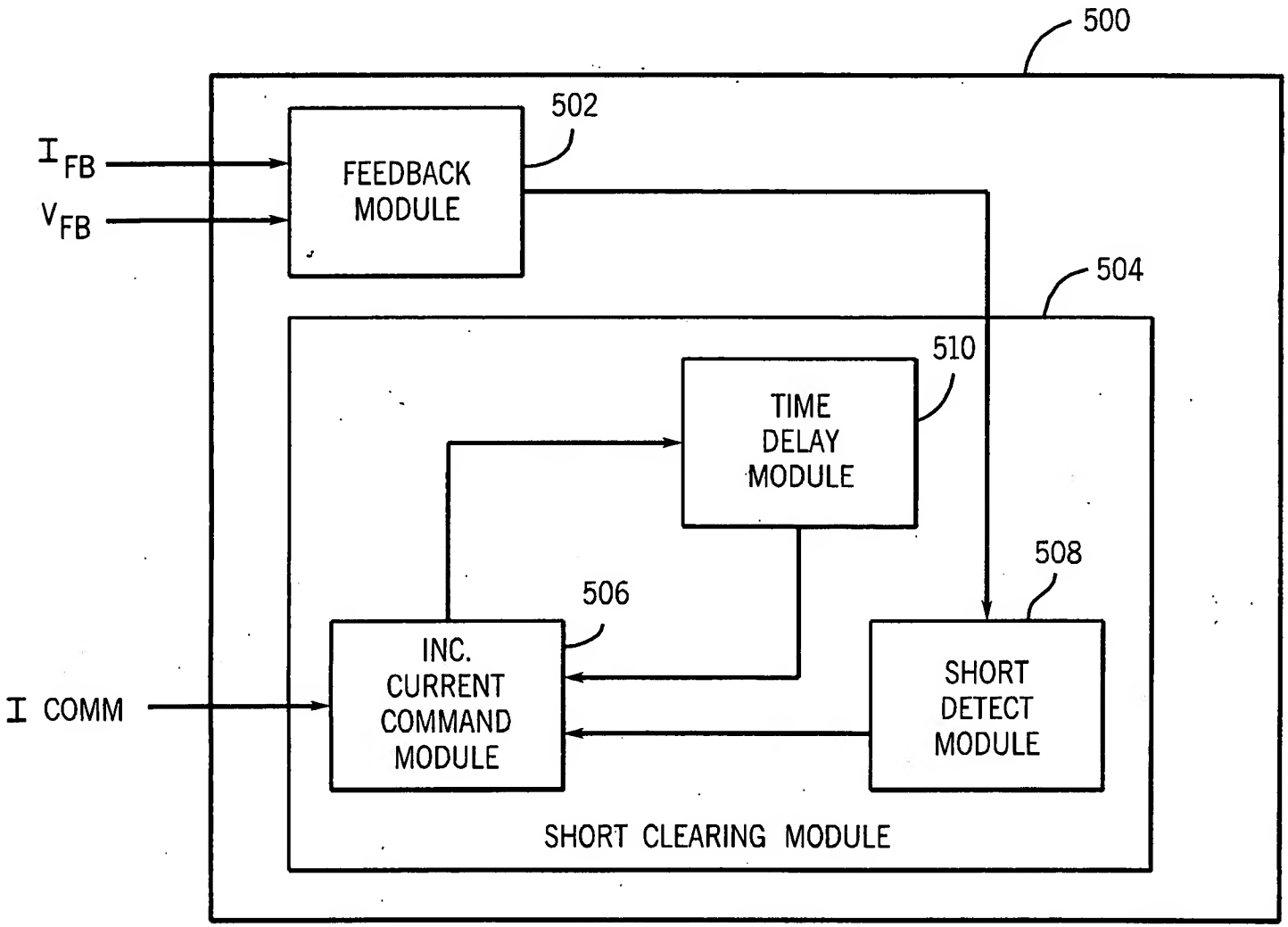
500
502
I_{FB}
V_{FB}
FEEDBACK MODULE
504
510
TIME DELAY MODULE
508
506
INC. CURRENT COMMAND MODULE
SHORT DETECT MODULE
I COMM
SHORT CLEARING MODULE

FIG. 5

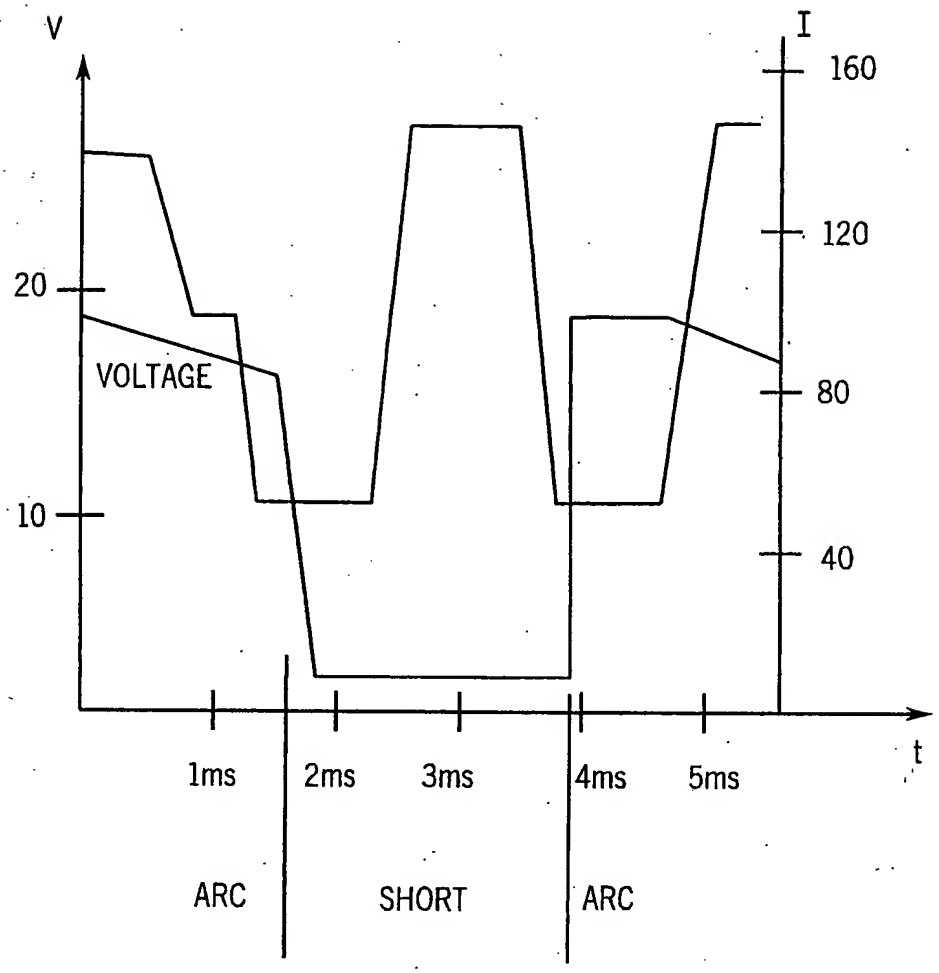
V
I
160
120
80
40
20
10
VOLTAGE
1ms
2ms
3ms
4ms
5ms
t
ARC
SHORT
ARC

FIG. 6

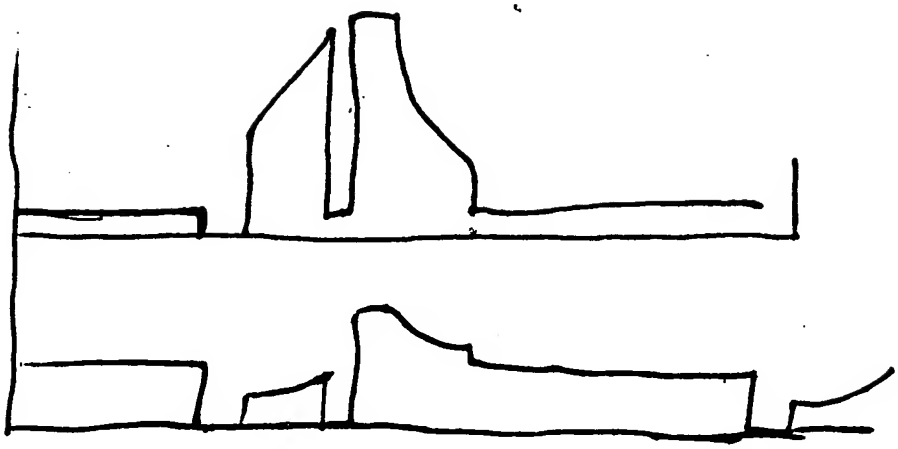

Fig 7

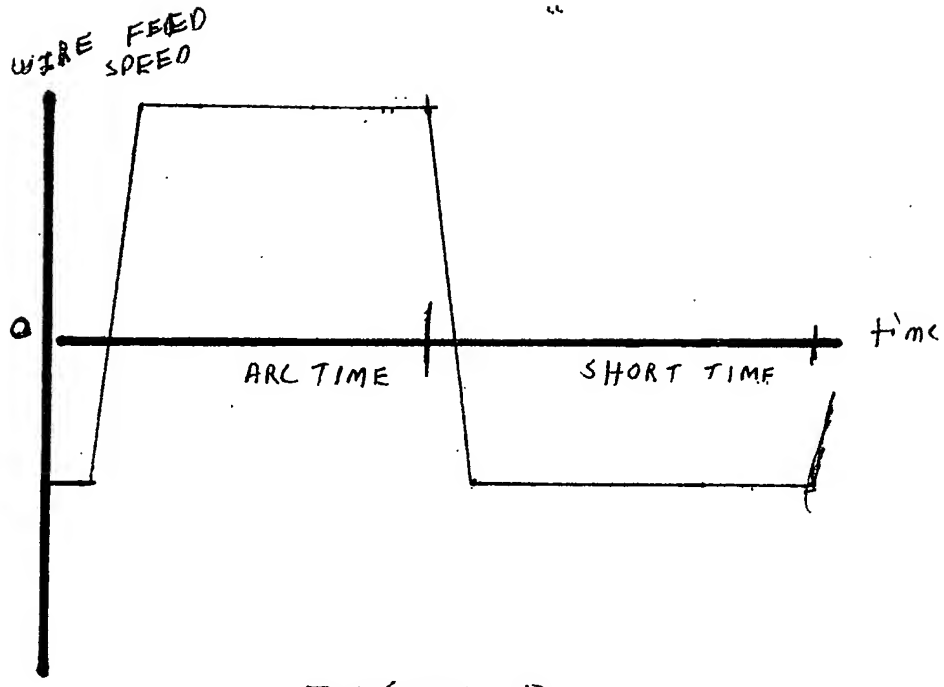

FIGURE 8